

**In the Claims:**

Please amend claims 1, 5, 9, 13-16 as follows:

1. (Currently amended) A method of rescuing a mammal from a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to an irradiated mammal, thereby rescuing said mammal from a lethal dose of total body irradiation, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

2. (Original) The method of claim 1, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

3. (Original) The method of claim 2, wherein said mammal is a human.

4. (Original) The method of claim 1, wherein said administration is infusion.

5. (Currently amended) A method of enhancing hematopoiesis in a mammal, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

6. (Original) The method of claim 5, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

7. (Original) The method of claim 6, wherein said mammal is a human.

8. (Original) The method of claim 5, wherein said administration is infusion.

9. (Currently amended) A method of enhancing hematopoietic stem cell differentiation in a mammal given a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to an irradiated mammal, thereby enhancing hematopoietic stem cell differentiation in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

10. (Original) The method of claim 9, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

11. (Original) The method of claim 10, wherein said mammal is a human.

12. (Original) The method of claim 9, wherein said administration is infusion.

13. (Currently amended) A method of enhancing the hematopoietic recovery in a mammal given a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to an irradiated mammal, thereby enhancing the hematopoietic recovery in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

14. (Currently amended) A method of treating a mammal comprising an ablated marrow, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to a mammal, thereby treating said mammal comprising an ablated marrow, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

15. (Currently amended) A method of enhancing hematopoiesis in a mammal comprising an ablated marrow, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal comprising an ablated marrow, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.

16. (Currently amended) A method of increasing survival of a mammal exposed to a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic ~~but otherwise identical~~ donor mammal to an irradiated mammal, thereby increasing the survival of a mammal exposed to a lethal dose of total body irradiation, wherein said isolated marrow stromal cells are administered immediately upon isolation or following a period of *in vitro* culturing.